



# STIC Search Report

## EIC 2800

STIC Database Tracking Number 161725

TO: Tania Courson  
Location: 6D28  
Art Unit : 2859  
Tuesday, April 26, 2005

Case Serial Number: 10/612199

From: Irina Speckhard  
Location: EIC 2800  
JEFF-4B59  
Phone: (571) 272-2554

irina.speckhard@uspto.gov

### Search Notes

Examiner Courson,

Please find attached Fast and Focused prior-art search results from the patent and non-patent abstract and full-text databases. The search did not locate many relevant references, you are welcome to submit a request for a regular full text search.

Thank you,

*Irina Speckhard*



151725

## SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800

Rev. 3/15/2004 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 272-2511.

Date 4/26/05 Serial # 101612,199 Priority Application Date \_\_\_\_\_

Your Name Cowson Tania Examiner # 79136

AU 2859 Phone \_\_\_\_\_ Room \_\_\_\_\_

In what format would you like your results? Paper is the default. ☒ PAPER ☐ DISK ☐ EMAIL

If submitting more than one search, please prioritize in order of need.

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB

Other: \_\_\_\_\_

What relevant art have you found so far? Please attach pertinent citations or Information Disclosure Statements. \_\_\_\_\_

What types of references would you like? Please checkmark:

Primary Refs \_\_\_\_\_ Nonpatent Literature \_\_\_\_\_ Other \_\_\_\_\_

Secondary Refs \_\_\_\_\_ Foreign Patents \_\_\_\_\_

Teaching Refs \_\_\_\_\_

What is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

R &amp; F

see attached IRP

## Staff Use Only

Searcher: Spock Lane

Searcher Phone: \_\_\_\_\_

Searcher Location: STIC-EIC2800, JEF-4B68

Date Searcher Picked Up: 4/26/05Date Completed: 4/26/05Searcher Prep/Rev Time: 30Online Time: 30

## Type of Search

Structure (#) \_\_\_\_\_

Bibliographic ☒

Litigation \_\_\_\_\_

Fulltext ☒Patent Family ☒Other all

## Vendors

STN \_\_\_\_\_

Dialog ☒Questel/Orbit ☒

Lexis-Nexis \_\_\_\_\_

WWW/Internet \_\_\_\_\_

Other \_\_\_\_\_

citat.

## Query/Command : HIS

File : PLUSPAT

## SS Results


1	2	(1) ..FAM US20040255477/PN
2	1	..CITF US20040255477/PN
3	1	..CITB US20040255477/PN

Search statement 4

## Query/Command : PRT MAX SET


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1 / 2 PLUSPAT - ©QUESTEL-ORBIT - image

**PN** -  WO2004113827 A2 20041229 [WO2004113827]  
**TI** - (A2) STUD FINDER  
**OTI** - (A2) DETECTEUR DE CADRE SUPPORT  
**LA** - ENGLISH (ENG)  
**PA** - (A2) GIST LESLIE D (US); LEVINE STEVEN R (US); IRWIN IND TOOL COMPANY (US)  
**PA0** - IRWIN INDUSTRIAL TOOL COMPANY; 29 E. Stephenson Street, Freeport, IL 61032 (US) (except US)  
 LEVINE, Steven, R.; 201 Fernbrook Drive, Mooresville, NC 28117 (US) (only US)  
 GIST, Leslie, D.; 9110 Twin Trail Drive, Huntersville, NC 28078 (US) (only US)  
**IN** - (A2) GIST LESLIE D (US); LEVINE STEVEN R (US)  
**AP** - WOUS2004018739 20040610 [2004WO-US18739]  
**PR** - US46553303 20030618 [2003US-0465533]  
 US61219903 20030701 [2003US-0612199]  
**IC** - (A2) G01B-011/00  
**EC** - G01C-015/00A1  
**DS** - AE; AE (utility model); AG; AL; AL (utility model); AM; AM (provisional patent); AM (utility model); AT; AT (utility model); AU; AZ; AZ (utility model); BA; BB; BG; BG (utility model); BR; BR (utility model); BW; BY; BY (utility model); BZ; BZ (utility model); CA; CH; CN; CN (utility model); CO; CO (utility model); CR; CR (utility model); CU (inventor's certificate); CU; CZ; CZ (utility model); DE; DE (utility model); DK; DK (utility model); DM; DZ; EC; EC (utility model); EE; EE (utility model); EG; EG (utility model); ES; ES (utility model); FI; FI (utility model); GB; GD; GE; GE (utility model); GH; GM; HR (consensual patent); HR; HU; HU (utility model); ID; IL; IN; IS; JP; JP (utility model); KE; KE (utility model); KG; KG (utility model); KP (inventor's certificate); KP; KP (utility model); KR; KR (utility model); KZ; KZ (provisional patent); KZ (utilit; European patent (AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR); OAPI patent (BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG; BF (utility model); BJ (utility model); CF (utility model); CG (utility model); CI (utility model); CM (utility model); GA (utility model); GN (utility model); GQ (utility model); GW (utility model); ML (utility model); MR (utility model); NE (utility model); SN (utility model); TD (utility model); TG (utility model)); ARIPO patent (BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW); Eurasian patent (AM; AZ; BY; KG; KZ; MD; RU; TJ; TM)  
**DT** - Corresponding document  
**STG** - (A2) Publ. Of int. Appl. W/out int. Search rep  
**AB** - A stud finder for a light generating device, having a surface and a connection structure on the surface to removably mount either a light generating device or a leveling device thereto.  
**UP** - 2004-53

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2 / 2 PLUSPAT - ©QUESTEL-ORBIT

**PN** -  US2004255477 A1 20041223 [US20040255477]  
**TI** - (A1) Stud finder  
**IN** - (A1) GIST LESLIE D (US); LEVINE STEVEN R (US)  
**AP** - US61219903 20030701 [2003US-0612199]  
**FD** - Cont. of: US 10465533 - 20030618 [2003US-0465533] ABANDONED  
**PR** - US61219903 20030701 [2003US-0612199]  
US46553303 20030618 [2003US-0465533]  
**IC** - (A1) G01C-015/00  
**EC** - G01C-015/00A1  
**PCL** - ORIGINAL (O) : 033286000  
**DT** - Basic  
**STG** - (A1) Utility Patent Application published on or after January 2, 2001  
**AB** - A stud finder for a light generating device, having a surface and a connection structure on the surface to removably mount either a light generating device or a leveling device thereto.  
**UP** - 2004-52

Search statement 2

## SYSTEM:OS - DIALOG OneSearch

File 2:INSPEC 1969-2005/Apr W3  
(c) 2005 Institution of Electrical Engineers

File 6:NTIS 1964-2005/Apr W3  
(c) 2005 NTIS, Intl Cpyrght All Rights Res

File 8:Ei Compendex(R) 1970-2005/Apr W3  
(c) 2005 Elsevier Eng. Info. Inc.

File 34:SciSearch(R) Cited Ref Sci 1990-2005/Apr W3  
(c) 2005 Inst for Sci Info

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info

File 35:Dissertation Abs Online 1861-2005/Mar  
(c) 2005 ProQuest Info&Learning

File 65:Inside Conferences 1993-2005/Apr W4  
(c) 2005 BLDSC all rts. reserv.

File 94:JICST-EPlus 1985-2005/Mar W2  
(c) 2005 Japan Science and Tech Corp(JST)

File 99:Wilson Appl. Sci & Tech Abs 1983-2005/Mar  
(c) 2005 The HW Wilson Co.

File 144:Pascal 1973-2005/Apr W3  
(c) 2005 INIST/CNRS

File 305:Analytical Abstracts 1980-2005/Apr W3  
(c) 2005 Royal Soc Chemistry

\*File 305: Alert feature enhanced for multiple files, duplicate removal, customized scheduling. See HELP ALERT.

File 315:ChemEng & Biotec Abs 1970-2005/Mar  
(c) 2005 DECHEMA

File 350:Derwent WPIX 1963-2005/UD,UM &UP=200526  
(c) 2005 Thomson Derwent

\*File 350: For more current information, include File 331 in your search.  
Enter HELP NEWS 331 for details.

File 347:JAPIO Nov 1976-2004/Dec(Updated 050405)  
(c) 2005 JPO & JAPIO

File 344:Chinese Patents Abs Aug 1985-2004/May  
(c) 2004 European Patent Office

File 371:French Patents 1961-2002/BOPI 200209  
(c) 2002 INPI. All rts. reserv.

\*File 371: This file is not currently updating. The last update is 200209.

Set	Items	Description
S1	4806	AU=(LEVINE, S? OR LEVINE S?)
S2	16	AU=(GIST, L? OR GIST L?)
S3	4821	S1:S2
S4	1	S3 AND STUD(2N) (FIND?? OR LOCAT???)
S5	17	S3 AND ((LIGHT? OR LEVELING) (2N) (GENERAT? OR PRODUC? OR EM- IT?) OR LASER? ?)
S6	15	RD (unique items)
S7	2	S6 AND IC=(G01B-011/00 OR G01C-015/00A1)
S8	13	S6 NOT S7
S9	503	STUD(2N) (FIND?? OR LOCAT???)
S10	2747135	(LIGHT? OR LEVELING) (2N) (GENERAT? OR PRODUC? OR EMIT?) OR - LASER? ?
S11	5623975	(ROTAT??????? OR ROTAR? OR PIVOT??????? OR SWING??????? OR IN- CLIN??????? OR TURN??????? OR TILT??????? OR ORBIT?)
S12	41460	IC=(G01B-011/00 OR G01C-015/00A1)
S13	2144831	SWITCH? OR BUTTON? ? OR PUSH???() (BUTTON? ? OR KNOB? ?) OR KNOB? ?
S14	347395	(SECOND OR SECONDARY OR BELOW OR BOTTOM OR LOWER) (2N) SURF- AC???
S15	9375	(SWITCH? OR BUTTON? ? OR PUSH???() (BUTTON? ? OR KNOB? ?) OR KNOB? ?) (2N) SURFAC?
S16	5	S9 AND S10
S17	5	RD (unique items)
S18	163	S9 AND S11
S19	6	S18 AND (LIGHT? OR LEVELING OR LEVELED)
S20	157	S18 NOT S19
S21	6	RD S19 (unique items)
S22	5	S21 NOT S16
S23	0	S20 AND S12
S24	11	S20 AND S13
S25	11	RD (unique items)
S26	146	S20 NOT S24
S27	0	S26 AND S15
S28	0	S9 AND S15
S29	14	S9 AND S14
S30	10771	S14 AND S13
S31	0	S30 AND S9
S32	23	S9 AND S13
S33	23	RD (unique items)
S34	5	S33 AND SURFACE???
S35	5	RD (unique items)
S36	18	S33 NOT S34
S37	0	S36 AND S15
S38	0	S36 AND S12
S39	18	S36
S40	163	S9 AND S11
S41	12	S40 AND S13
S42	12	RD (unique items)
S43	0	S42 NOT S16, S19, S24, S32

4/3,AB/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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016764265

WPI Acc No: 2005-088541/200510

XRPX Acc No: N05-077250

**Stud finder** for e.g. leveling device e.g. laser line generator, has connection structure on surface e.g. wall, to removably mount laser line generator whose output produces fan-shaped beam  
Patent Assignee: GIST L D (GIST-I); LEVINE S R (LEVI-I); IRWIN IND TOOL CO (IRWI-N)

Inventor: **GIST L D; LEVINE S R**

Number of Countries: 108 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040255477	A1	20041223	US 2003465533	A	20030618	200510 B
			US 2003612199	A	20030701	
WO 2004113827	A2	20041229	WO 2004US18739	A	20040610	200510

Priority Applications (No Type Date): US 2003465533 A 20030618; US 2003612199 A 20030701

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040255477	A1	23	G01C-015/00	Cont of application	US 2003465533
WO 2004113827	A2	E	G01B-011/00		

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20040255477 A1

Abstract (Basic):

NOVELTY - The finder has a connection structure on a surface e.g. wall, to removably mount either a light generating device or a leveling device e.g. laser line generator (10). The output of the generator produces a fan-shaped beam. The beam propagates along the surface of the wall. The finder is operable when the device is mounted on the surface. The surface has an orifice for receiving a marking pin.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(A) a light generating or a leveling device using **stud finder**

(B) an accessory attachment for a light generating device or a leveling device

(C) a method for finding a concealed feature and aligning objects on a surface

(D) a kit for a light generating device or leveling with a **stud finder**.

USE - Used for light generating device and a leveling device e.g. laser line generator and laser alignment device.

ADVANTAGE - The fan-shaped beam enables the laser light to project over and beyond obstacles, such as moldings placed in a doorway, picture frames, wavy or stuccoes surface on an interior wall. The finder with the laser line generator thus allows a user to detect hidden structures behind the surfaces.

16/12/99  
SAME  
INVENTION



DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of a laser line generator and a **stud finder** attachment.

Laser line generator (10)

**Stud finder** (100)

Housing (101)

Latch (106)

Forward notch (107)

pp; 23 DwgNo 10/15

The finder with the laser line generator thus allows a user to detect hidden structures behind the surfaces.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of a laser line generator and a stud finder attachment.

Laser line generator (10)

Stud finder (100)

Housing (101)

Latch (106)

Forward notch (107)

pp; 23 DwgNo 10/15

7/3,AB/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014969902

WPI Acc No: 2003-030416/200302

XRPX Acc No: N03-024057

Laser alignment line generating device e.g. for building construction, interior decoration, projects light in fan shape

Patent Assignee: AMERICAN TOOL CO INC (AMTO-N); IRWIN IND TOOL CO (IRWI-N);

HOPPER R K (HOPP-I); MALARD F J (MALA-I); POOLE D L (POOL-I); POOLE R N

(POOL-I); LEVINE S R (LEVI-I)

Inventor: HOPPER R K; MALARD F J; POOLE D L; POOLE R N; **LEVINE S R**

Number of Countries: 101 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200293108	A1	20021121	WO 2002US14416	A	20020507	200302 B
US 20020178596	A1	20021205	US 2001291135	P	20010515	200304
			US 2002141392	A	20020507	
EP 1393016	A1	20040303	EP 2002731703	A	20020507	200417
			WO 2002US14416	A	20020507	
US 6735879	B2	20040518	US 2001291135	P	20010515	200433
			US 2002141392	A	20020507	
US 20040123473	A1	20040701	US 2001291135	P	20010515	200444
			US 2002141392	A	20020507	
			US 2003734362	A	20031211	
AU 2002303665	A1	20021125	AU 2002303665	A	20020507	200452
US 20040187327	A1	20040930	US 2001291135	P	20010515	200465
			US 2002141392	A	20020507	
			US 2003465534	A	20030618	
			US 2003612035	A	20030701	
			US 2004819543	A	20040407	
US 20040258126	A1	20041223	US 2003465534	A	20030618	200504 N
			US 2003612035	A	20030701	
CN 1551975	A	20041201	CN 2002810031	A	20020507	200516

Priority Applications (No Type Date): US 2001291135 P 20010515; US

2002141392 A 20020507; US 2003734362 A 20031211; US 2003465534 A 20030618

; US 2003612035 A 20030701; US 2004819543 A 20040407

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200293108 A1 E 34 G01B-011/26

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA  
ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR

X  
SAME  
INVENTOR  
DIFFERENT  
INVENTION  
SIMILAR  
BUT NOT  
SAME

IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW  
US 20020178596 A1 G01C-015/00 Provisional application US 2001291135

EP 1393016 A1 E G01B-011/26 Based on patent WO 200293108  
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI TR  
US 6735879 B2 G01C-015/00 Provisional application US 2001291135  
US 20040123473 A1 G01C-015/00 Provisional application US 2001291135

AU 2002303665 A1 G01B-011/26 Cont of application US 2002141392  
US 20040187327 A1 G01C-015/00 Based on patent WO 200293108  
Provisional application US 2001291135

CIP of application US 2002141392  
Cont of application US 2003465534  
Cont of application US 2003612035  
CIP of patent US 6735879  
US 20040258126 A1 H01S-003/00 Cont of application US 2003465534  
CN 1551975 A G01B-011/26

Abstract (Basic): WO 200293108 A1

Abstract (Basic):

NOVELTY - The device has a asymmetric intensity pattern light source, battery and projection lens (24) to **produce a light** projection in fan shape. A pair of spirit levels (16,18) is provided in the device outside the housing.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) Method of projecting fan-shaped **laser** light onto surface;

(2) Lens for receiving and projecting light; and

(3) Method of aligning object with light beam.

USE - For generating **laser** line for surface alignment e.g. in building construction, interior decoration such as brick laying, hanging pictures and wall decorations, etc., for use by carpenter, painter, interior decorator, etc.

ADVANTAGE - Has its own spirit level for self-horizontal alignment before **laser** projection.

DESCRIPTION OF DRAWING(S) - The figure shows the **laser** line generator perspectively.

Spirit levels (16,18)

Projection lens (24)

pp; 34 DwgNo 1/11

8/3,AB/1 (Item 1 from file: 6)  
DIALOG(R)File 6:NTIS  
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0908199 NTIS Accession Number: AD-D008 538/1/XAB

Optical Waveguide Dosimeter  
(Patent Application)

Levine, S. ; Kronenberg, S. ; Levine, H. ; McLaughlin, W. L. ;  
Siebentritt, C. R.

Department of the Army, Washington, DC.

Corp. Source Codes: 000137000; 109900

Report No.: PAT-APPL-6-267 312

Filed 28 May 81 8p

Languages: English Document Type: Patent

Journal Announcement: GRAI8122

This Government-owned invention available for U.S. licensing and, possibly, for foreign licensing. Copy of application available NTIS. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A02/MF A01

The general object of this invention is to provide a low-cost, portable dosimeter for personnel dosimetry that does not require maintenance and that can be used in civil defense emergencies. A further object of the invention is to provide such a dosimeter that does not require any power source or auxiliary equipment such as a readout device or charger. A still further object of the invention is to provide such a dosimeter that can be stored for long periods and be available instantly for use in case of an emergency. Another object of the invention is to increase the sensitivity of leuko dye dosimetry by several orders of magnitude to make it applicable for emergency personnel dosimetry where doses of 0 to 1000 rads (tissue) are of interest. It has now been found that the foregoing objects can be attained by incorporating a liquid solution of a leuko dye as the core of an optical wave guide. The optical wave guide dosimeter includes the liquid solution of leuko dye hermetically sealed in flexible and transparent plastic tubing.

8/3,AB/2 (Item 1 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
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02790256

E.I. Monthly No: EIM8909-028613

Title: UV-laser induced metallization on polyimide from  
electroplating solution.

Author: Zahavi, J.; Rotel, M.; Katz, D.; Levine, S.

Corporate Source: Technion - Israel Inst of Technology, Haifa, Isr

Conference Title: Fourth Israel Materials Engineering Conference IMEC IV

Conference Location: Beer Sheva, Isr Conference Date: 19881207

E.I. Conference No.: 12269

Source: Israel Journal of Technology v 24 3-4,Pt B 1988. p 543-547

Publication Year: 1988

CODEN: ISJTAC ISSN: 0021-2202

Language: English

Abstract: Direct laser metallization of semiconductor substrates immersed in electroplating solution without use of external current or lithography procedures has been reported by several investigators. No major efforts have been devoted to polymeric substrates in this context. Use of

8/3,AB/12 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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016751081

WPI Acc No: 2005-075359/200508

XRPX Acc No: N05-064850

Swivel base for **laser generating device/leveling**

device, has top connection structure with latching mechanism to mount device, and lower non-mechanical attachment with adhesive strips to its bottom surface for mounting to wall surface

Patent Assignee: IRWIN IND TOOL CO (IRWI-N)

Inventor: **LEVINE S R**

Number of Countries: 108 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 2004113985	A2	20041229	WO 2004US18724	A	20040610	200508 B

Priority Applications (No Type Date): US 2003612035 A 20030701; US 2003465534 A 20030618

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 2004113985	A2	E	43	G02B-007/00	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): WO 2004113985 A2

Abstract (Basic):

NOVELTY - The base has a top connection structure comprising a latch (116) to receive and mount a **light generating device/leveling device**. A lower non-mechanical attachment (100) is mounted to the bottom of the top portion, and comprises adhesive strips (109) at its bottom surface to enable mounting to the wall surface.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) **light generating device**;
- (2) leveling device;
- (3) method for aligning objects on a surface;
- (4) kit for **light generating device**; and
- (5) kit for leveling device.

USE - Swivelable base for **light generating device** (claimed) such as **laser generating device**, and also for leveling device (claimed) such as **laser alignment device** for aligning surfaces such as walls.

ADVANTAGE - The **laser generation device** generates a fan-shaped beam that is able to propagate along the wall surface and beyond obstacles such as moldings placed in doorways, picture frames.

DESCRIPTION OF DRAWING(S) - The figure shows an exploded view of the swivel base.

attachment (100)  
retainer (106)  
adhesive strips (109)  
concave recess (112)  
latch (116)

X  
- SAME INVENTOR  
- CANT USE DUE TO DATE

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**Zircon Stud Finders**

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Discounts on Zircon **stud** finders for finding wood and metal studs[www.contractor-books.com](http://www.contractor-books.com)**LaserStraight Laser Level**Premium laser level As Seen On TV. Free **Stud Finder**. Official Site[www.laser-straight.com](http://www.laser-straight.com)**Web**Results 1 - 10 of about 37,000 for **stud finder**. (0.21 seconds)**Howstuffworks "How do stud finders work?"**

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I have an electronic **stud finder**, and I am amazed at how well it works. How does it know where the **studs** are?

<http://home.howstuffworks.com/question271.htm>**Stanley Laser Tools**

Introducing the Complete Line of Stanley Laser and IntelliTools.

[www.StanleyTools.com](http://www.StanleyTools.com)**Stud Finders**

In order to do even the most basic repairs or improvements to your electrical

system, you may need to find and isolate the hot wire.

[http://homerepair.about.com/cs/tools/a/stud\\_finders.htm](http://homerepair.about.com/cs/tools/a/stud_finders.htm)**Buy Stud Finder**

Find Measuring & Marking tools at Aubuchon Hardware's new site  
[HardwareStore.com](http://HardwareStore.com)

**Stud Finder - Stanley 47-400 Magnetic**

A magnetic **stud finder** actually finds the nails or screws that are holding the

drywall, lathing or flooring to the **studs**, joists or beams.<http://homerepair.about.com/cs/tools/gr/SFmagnetic.htm>**Strait Line Stud Finder**

Buy a Strait Line **Stud Finder** at Tyler Tool. Free Shipping on \$99

[www.tylertool.com](http://www.tylertool.com)**Simple Stud Finder | THIS OLD HOUSE**

If you don't have an electronic **stud finder**, you can locate **studs** behind drywall

with nothing more than a table lamp.

<http://www.thisoldhouse.com/toh/knowhow/solutions/article/0,16417,212066,00.html>**Stud Finders and Sensors**

Find woodworking supplies, tools, and hardware at Woodworkers Supply.

[www.woodworker.com](http://www.woodworker.com)**Stud Finders & Sensors**

... Laser line automatically levels, **stud finder** detects **studs** through walls up

to 3/4 in. and rubber ... STRAIT-LINE 6041500CD 3/4" Depth **Stud Finder** 75 ...<http://shopping.msn.com/marketplace.aspx?mpType=1&pcId=10231&catId=2554>**Stud Finder**

Compare prices on Tools & Hardware at Pricetool!

[www1.PriceTool.com](http://www1.PriceTool.com)**Amazon.com: Tools & Hardware: Strait-Line 64020 Stud Finder**

... The **Stud Finder** can be used by itself, but it's a slick duo with ... The **Stud Finder** is light but rugged and fits nicely in the palm of the hand. ...

[http://www.amazon.com/exec/obi-dos/tg/detail/-/B0000CCXWH?v=g\\_lance](http://www.amazon.com/exec/obi-dos/tg/detail/-/B0000CCXWH?v=g_lance)

**How to Buy It: Stud Finder - eHow.com**

... Are you wondering where you can buy it: Cheap **stud finder**, high quality **stud finder**, free **stud finder**? Well we probably can't help you find it for free, ...

[http://www.ehow.com/buy\\_13244\\_stud-finder.html](http://www.ehow.com/buy_13244_stud-finder.html)

**STRAIT-LINE Stud Finder 60 Product Information**

The **Stud Finder** can be used independently or in combination with the Laser Level to not just find **studs**, but to effortlessly mark spots and generate ...

[http://www.strait-line.com/irwin/consumer/straitline/jhtml/stud\\_finder\\_60.jhtml](http://www.strait-line.com/irwin/consumer/straitline/jhtml/stud_finder_60.jhtml)

**STRAIT-LINE Stud Finder 150 Product Information**

The **Stud Finder** 150 is specifically calibrated for drywall, paneling and floor surfaces, so that no **stud** is left undetected. Suitable for hanging heavy ...

[http://www.strait-line.com/irwin/consumer/straitline/jhtml/stud\\_finder\\_150.jhtml](http://www.strait-line.com/irwin/consumer/straitline/jhtml/stud_finder_150.jhtml)

**Shop DoItYourself.com for Stud Finders Measuring Tools Hand Tools ...**

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<http://doityourself.com/store/studfinders.htm>

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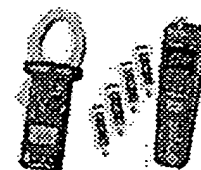
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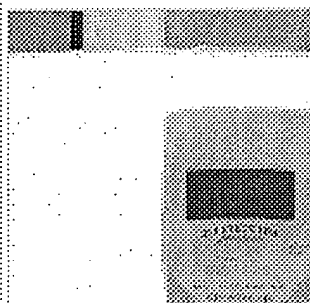
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The only Studsensors  
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## The ZIRCON Advantage

Zircon Corporation designs, develops, manufactures and markets the largest selling line of high-technology electronic hand tools for professional contractors and home improvement enthusiasts.

Whether you are a beginner or a professional, Zircon electronic tools will take the guesswork, mystery and anxiety out of projects. From the casual home improvement project to the complex profession contract, Zircon tools offer unmatched advantages—saving time, labor, and money, while providing unsurpassed accuracy.



Click on a Model in the Table below for more information.  
 Click on a Feature (or scroll down the page) for a description

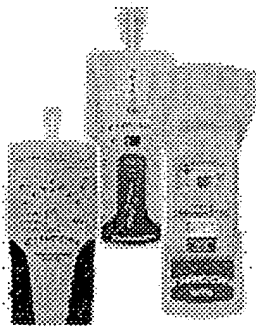
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**\*\* NEW TriScanner OneStep with CenterVision Technology**

Model:	<a href="#">StudScan Depth</a>	<a href="#">TruCal</a>	<a href="#">OTS Warning</a>	<a href="#">Audio Indicator</a>	<a href="#">SpotLite System</a>	<a href="#">AC Wire Warning</a>	<a href="#">Metal Scan</a>	<a href="#">AC Scan</a>



### StudSensors Metal Finders

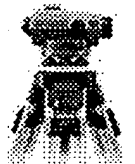


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### Optical Levels

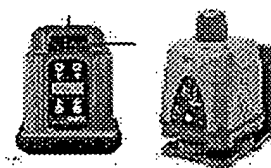


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Levels:  
Transits  
Theodolite  
Abney  
& LTUs**



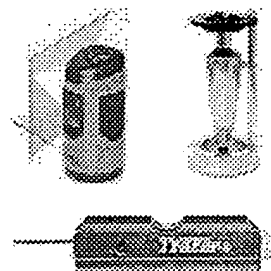
**CST  
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### LASERMARK® Rotary Lasers & Accessories



► **Selection Chart**

### LASERMARK® Straight-Line Lasers & Accessories

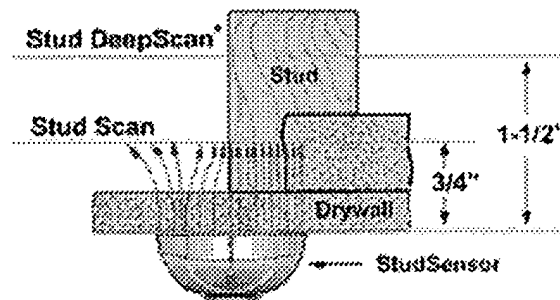


<u>StudSensor SL</u>	.75 in.	Yes	Yes	Yes	Yes	No	No	No
<u>StudSensor Pro SL</u>	1.5 in.	Yes	Yes	Yes	Yes	No	No	No
<u>StudSensor Pro SL AC</u>	1.5 in.	Yes	Yes	Yes	Yes	Yes	No	No
<u>TriScanner Pro SL</u>	1.5 in.	Yes	Yes	Yes	Yes	Yes	3 in	No
<u>TriScanner OneStep</u>	1.5 in.	Yes	Yes	Yes	Center Scan	Yes	3 in	No
<u>MultiScanner OneStep</u>	1.5 in.	Yes	Yes	Yes	Center Scan	Yes	3 in	Yes
<u>MultiScanner Pro SL</u>	1.5 in.	Yes	Yes	Yes	Yes	Yes	3 in	Yes
<u>MT6</u>	---	Yes	---	Yes	---	---	6 in	---

## Glossary of Terms

### StudScan Depth

**Normal mode**  
detects wood or metal through up to ¾ inch of drywall.



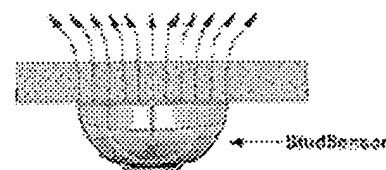
### Selectable DeepScan®

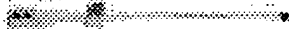
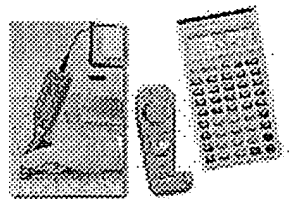
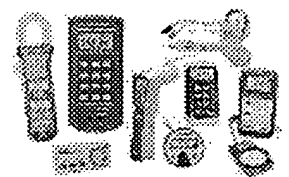
Models with DeepScan® can detect wood or metal studs and joists up to 1-½ inches deep. An indicator light tells you when DeepScan is active.

▲ TO TOP

### TruCal®

TruCal® technology provides instant and accurate one-touch calibration each time the tool is used, ensuring accuracy for each and



**Straight-Line Lasers****LASERMARK<sup>®</sup>  
Accessories****Magna-Trak  
Magnetic Locators**[\(click here\)](#)**Measuring Tapes****Measuring Wheels &  
Paint Marking Systems****Specialty Calculators  
& Measuring Devices****Test Equipment****CST Berger Tripods**

every job.

TruCal calibrates your Zircon electronic tool to the particular surface you want to scan.

When you place the StudSensor against the wall and turn it on, it emits an electric field. The internal circuitry detects how much time it takes for the wall material under the StudSensor to reach a certain voltage. The circuitry then sets this as the zero level of capacitance, and the StudSensor is now calibrated.

[▲ TO TOP](#)

**Over-the-Stud Warning**

If a StudSensor is inadvertently calibrated over a stud, it will intermittently beep and blink. Simply move the StudSensor several inches to the left or right and try again.

[▲ TO TOP](#)

**Audio Indicator**

When your StudSensor detects a stud edge (or other targeted material), it emits a continuous audio tone. An intermittent beeping tells you that you've accidentally calibrated directly over a stud.

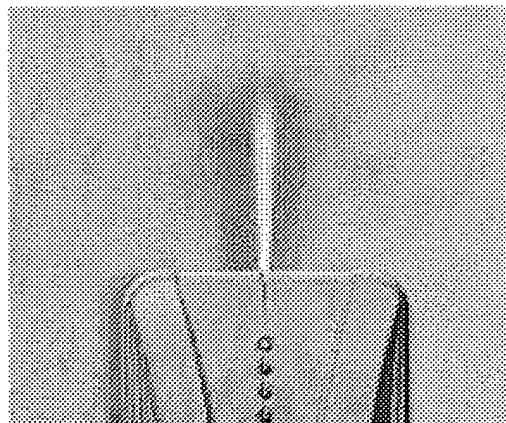
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**SpotLite<sup>™</sup> Pointing System**

This revolutionary feature projects a beam of light over a target when it is found, adding another measure of confidence to any scanning task.

All SpotLite products feature a single button that turns the units on and triggers the TruCal instant calibration before each use. A separate

LED illuminates when calibration is completed, a process that takes only a fraction of a second.



[▲ TO TOP](#)